Amendments to the Claims

This listing of claims replaces all prior versions and listings of claims in the application:

Listing of Claims:

1. (Previously presented) An isolated DNA molecule comprising a DNA sequence encoding a polypeptide with an amino acid sequence selected from the group consisting of the amino acid sequences of the polypeptides MTSP15, MTSP21, MTSP25; MTSP36, MTSP43, and MTSP47, as depicted in Fig. 1,

wherein said polypeptide has *Mycobacterium tuberculosis* specific antigenic and immunogenic properties.

2. (Original) An isolated portion of the DNA molecule of claim 1, said portion encoding a segment of said polypeptide shorter than the full-length polypeptide, said segment having *Mycobacterium tuberculosis* specific antigenic and immunogenic properties.

3. (Original) A vector comprising:

(a) the DNA molecule of claim 1; and

(b) transcriptional and translational regulatory sequences operationally linked to said DNA sequence, said regulatory sequences allowing for expression of the polypeptide encoded by said DNA sequence in a cell.

4. (Original) A vector comprising:

(a) the DNA molecule of claim 2; and

(b) transcriptional and translational regulatory sequences operationally linked to said DNA sequence, said regulatory sequences allowing for expression of the polypeptide encoded by said DNA sequence in a cell.

5. (Original) A cell transformed with the vector of claim 3.

6. (Original) A cell transformed with the vector of claim 4.

7. (Original) A composition comprising the vector of claim 3 and a pharmaceutically acceptable diluent or filler.

8. (Original) A composition comprising the vector of claim 4 and a pharmaceutically acceptable diluent or filler.

9-10. (Cancelled)

11. (Previously presented) An isolated polypeptide with an amino acid sequence selected from the group consisting of the sequences of the polypeptides MTSP15, MTSP21, MTSP25, MTSP36, MTSP43, and MTSP47, as depicted in Fig. 1,

wherein said polypeptide has *Mycobacterium tuberculosis* specific antigenic and immunogenic properties.

12. (Original) An isolated segment of the polypeptide of claim 11, said segment being shorter than the full-length polypeptide and having *Mycobacterium tuberculosis* specific antigenic and immunogenic properties.

13. (Previously Presented) A composition comprising the polypeptide of claim 11 and a pharmaceutically acceptable diluent or filler.

14. (Previously Presented) A composition comprising the polypeptide of claim 12 and a pharmaceutically acceptable diluent or filler.

15. (Previously Presented) A composition comprising at least two polypeptides of the *Mycobacterium tuberculosis* complex, or functional segments thereof, wherein at least one of said at least two polypeptides is the polypeptide of claim 11.

16. (Previously Presented) A composition comprising at least two polypeptides of the *Mycobacterium tuberculosis* complex, or functional segments thereof, wherein at least one of said at least segments is the segment of claim 12.

17. (Currently Amended) A method of diagnosis comprising:

(a) administration of a polypeptide to a subject suspected of having ~~or being susceptible to~~ a *Mycobacterium tuberculosis* infection, the polypeptide being selected from the group consisting of MTSP1, MTSP21, MTSP23, MTSP36, and MTSP43, as depicted in Fig. 1; and

(b) ~~detecting an immune response in~~ examining said subject for an immune response to said polypeptide segment, wherein the presence of an immune response to said polypeptide segment is [[as]] an indication that said subject has ~~or is susceptible to~~ a *Mycobacterium tuberculosis* infection.

18. (Currently Amended) A method of diagnosis comprising:

(a) administration of a polypeptide segment to a subject suspected of having ~~or being susceptible to~~ a *Mycobacterium tuberculosis* infection, the segment being a functional segment of the polypeptide selected from the group consisting of MTSP1, MTSP21, MTSP23, MTSP36, and MTSP43, as depicted in Fig. 1; and

(b) ~~detecting an immune response in~~ examining said subject for an immune response to said polypeptide segment, wherein the presence of an immune response to said polypeptide segment is [[as]] an indication that said subject has ~~or is susceptible to~~ a *Mycobacterium tuberculosis* infection.

19. (Currently Amended) A method of diagnosis comprising:

(a) administration of a composition to a subject suspected of having ~~or being susceptible to~~ a *Mycobacterium tuberculosis* infection, the composition comprising at least two polypeptides of the *Mycobacterium tuberculosis* complex, or functional segments thereof, wherein at least one of said at least two polypeptides is a polypeptide selected from the group consisting of MTSP1, MTSP21, MTSP23, MTSP36, and MTSP43, as depicted in Fig. 1; and

(b) ~~detecting an immune response in~~ examining said subject for an immune response to said polypeptide segment, wherein the presence of an immune response to said polypeptide

segment is [[as]] an indication that said subject has ~~or is susceptible to~~ a *Mycobacterium tuberculosis* infection.

20. (Currently Amended) A method of diagnosis comprising:

(a) administration of a composition to a subject suspected of having ~~or being susceptible to~~ a *Mycobacterium tuberculosis* infection, the composition comprising at least two polypeptides of the *Mycobacterium tuberculosis* complex, or functional segments thereof, wherein at least one of said at least two segments is a functional segment of a polypeptide selected from the group consisting of MTSP1, MTSP21, MTSP23, MTSP36, and MTSP43, as depicted in Fig. 1; and

(b) ~~detecting an immune response in~~ examining said subject for an immune response to said polypeptide segment, wherein the presence of an immune response to said polypeptide segment is [[as]] an indication that said subject has ~~or is susceptible to~~ a *Mycobacterium tuberculosis* infection.

21-36. (Cancelled)